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ABSTRACT

A network device includes one or more sprayers, multiple packet processors, and one or more desprayers. The sprayers receive packets on at least one incoming packet stream and distribute the packets according to a load balancing scheme that balances the number of bytes of packet data that is given to each of the packet processors. The packet processors receive the packets from the sprayers and process the packets to determine routing information for the packets. The desprayers receive the processed packets from the packet processors and transmit the packets on at least one outgoing packet stream based on the routing information.